

What is claimed is:

1. An electrical connector comprising:

a connector body having an inlet end and an outlet end,

said outlet end including a pair of spaced apart shoulders,

said shoulders extending radially outwardly of said outlet end,

a recess defined between said shoulders about said outlet end,

an annular retainer ring supported on said shoulders, a plurality of spring tangs blanked out of said retainer ring,

said tangs being circumferentially spaced about said retainer ring and projecting outwardly of said retainer ring in a cantilever manner,

said tangs being disposed above said recess whereby said recess provides a relief space for said tangs to facilitate the insertion of said connector through a knock out hole of an electric box to effect a snap fit connection.

2. An electrical connector comprising:

a connector body having an inlet end and an outlet end,

external threads having a groove between adjacent threads formed on said outlet end,

a snap fit retainer ring circumscribing said external threads,

said retainer ring having a plurality of tangs formed out of said retainer ring,

said tangs being circumferentially spaced about said retainer ring, said tangs projecting radially outwardly of said retainer ring in a cantilever manner,

and said retainer ring having a plurality of dimples projecting inwardly of said retainer ring,

whereby said dimples project into said grooves prohibiting separation of the connector body from said retainer ring when secured to an electric box.

3. An electrical connector as defined in Claim 2 wherein said plurality of tangs include:

a series of tangs blanked out of the material of said retainer ring whereby each tang of said series has a free end which includes a longitudinal edge portion of said retainer ring,

and said longitudinal edge portion being arcuately shaped so as to engage the edge of a knock out hole of an electric box for effecting electrical grounding of said connector.

4. An electrical connector as defined in Claim 3 wherein said free end of each of said tangs of said series includes a compound curvature in both a transverse and longitudinal direction.

5. An electrical connector as defined in Claim 3 wherein said plurality of tangs includes a second series of tangs circumferentially spaced about said retainer ring,

each of said second series of tangs being disposed about said retainer ring intermediately between the opposed longitudinal edges of said retainer ring,

said tangs of said second series of tangs having a free end and opposed outer wing portions adapted to engage an inner surface of the electric box, and

said free end of each of said second series of tangs having a projecting tip adapted to engage a peripheral portion of the knock out hole of an electrical box.

6. An electrical connector as defined in Claim 2 and including radially outwardly extending flange disposed about said inlet end of said connector body.

7. A snap fit retainer ring adapted for use on an electrical connector having a thread outlet end to effect a snap fit connection to an electrical box comprising:

a blank of a spring type metallic material,

said blank having opposed longitudinal extending edges and opposed end portions,

said opposed end portions being slightly spaced apart when said blank is formed to define a ring,

a plurality of tangs longitudinally spaced along the length of said blank,

said plurality of tangs including a series of tangs blanked out of said blank,

each of said tangs of said series being bent outwardly of said blank, and

a plurality of longitudinally spaced dimples projecting inwardly of said ring arranged to engage the grooves between adjacent threads of an outlet end of a connector.

8. A snap fit retainer ring as defined in Claim 7 wherein said dimples are laterally spaced transversely of the width of said ring.

9. A snap fit retainer ring as defined in Claim 8 wherein one of said opposed ends of said blank having a notch formed therein and the other of said opposed ends having a complementary tongue adapted to be received within said notch in the ring forming position of said blank.

10. An electrical connector assembly in combination with an electric box having at least one knockout hole comprising:

a connector body defining an inlet end and an outlet end,

an outwardly radially extending flange circumscribing said inlet end, said flange forming a stop to limit the insertion of said connector body through a knock out opening of an electrical box,

external threads formed on said outlet end,

a snap fit retainer ring supported on said external threads,

said snap fit retainer ring including a plurality of circumferentially spaced tangs,

said plurality of tangs including a first series of spaced apart tangs,

said tangs of said first series of tangs being blanked out of the material of said retainer ring,

said tangs of said first series of tangs being bent laterally outwardly of said retainer ring whereby the free end of said first series of tangs includes a longitudinally edge portion of said retainer ring,

and said plurality of tangs including a second series of tangs,

said tangs of said second series of tangs being blanked out of said retainer ring disposed wholly between the opposed longitudinal edges of said retainer ring,

said tangs of said second series of tangs being bent laterally outwardly of said retainer ring, and

said tangs of said second series of tangs including opposed outwardly bent wing portions and a projecting tit whereby the free ends of said wing portions are adapted to engage the inner surface of the electrical box and said projecting tit engaging the inner periphery of the knock out hole of the electric box in the assembled position of the electric box and connector to insure an electric grounding connection therebetween,

said retainer ring having a plurality of dimples
circumferentially spaced about said retainer ring,

said dimples projecting inwardly of said retainer ring
whereby said dimples engage the groove formed between
adjacent threads, and

a clamping means connected to said inlet for securing
a conductor relative to said connector body.

11. An electrical connector assembly defined in Claim
10 wherein said dimples are laterally spaced transversely
of the width of said retainer ring.

12. An electrical connector assembly as defined in
Claim 10 wherein said snap fit retainer ring is rendered
readily removable from said external threads

whereby said outlet end may be optionally threadedly
connected to an outlet box.